

FEB 24 2005

**510(k) Summary**

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Date: January 20, 2005  
Company: Aspect Medical Systems, Inc., 141 Needham St., Newton, MA 02464  
Contact Person: Christine Vozella phone: 303-926-5624 fax: 303-604-6477

Proprietary Name: Aspect Medical Systems BIS SRS  
Common Name: Electrode, Cutaneous Electrode  
Classification: Class II device. Refer to 21 CFR 882.1320

Predicate Devices: The Aspect Enhanced BIS Sensor, K002734, cleared September 14, 2000 and the Aspect Zipprep Electrode, K940802, cleared June 22, 1994

Device Description: The BIS SRS (Semi-reusable sensor) is a single patient use, disposable, pre-gelled 4 electrode array with a patented Zipprep design that is applied directly to the patient's forehead to record electro-physiological signals. The electrodes have a standard snap construction. There is an electronic smart card memory device in the multiple use cable. The SRS will be packaged as a set, composed of 100 disposable electrode arrays along with 1 multiple use cable.

Indications for Use: The BIS SRS is applied directly to the patient's skin to enable recordings of electrophysiological (such as EEG) signals.

Similarities:

- same indications for use as the Predicate devices
- 4 electrodes – same as Enhanced BIS Sensor predicate device
- same operating principle (Zipprep technology) as both predicate devices
- same biocompatible skin contacting materials as the Zipprep Electrode predicate device
- same standard snap and eyelet construction as the Zipprep Electrode predicate device

Differences:

- minor construction differences
- smart card memory device is located in the multiple use cable rather than the sensor paddle
- No flexible circuit technology

Electrical and mechanical testing was conducted. Results indicate the device is safe for its intended use.

Aspect Medical Systems believes these modifications do not raise new questions of safety or effectiveness. The intended use is the same as both predicate devices. The fundamental scientific technology remains the same as the predicate devices. In summary, the BIS SRS described in this submission is substantially equivalent to the predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

FEB 24 2005

Aspect Medical Systems, Inc.  
c/o Mr. Ned E. Devine, Jr.  
Entela, Inc.  
3033 Madison Avenue, SE  
Grand Rapids, Michigan 49548

Re: K050313  
Trade/Device Name: BIS SRS (Semi-Reusable Sensor)  
Regulation Number: 21 CFR 882.1400  
Regulation Name: Electroencephalograph  
Regulatory Class: II  
Product Code: GWQ  
Dated: February 7, 2005  
Received: February 9, 2005

Dear Mr. Devine:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 - Mr. Ned E. Devine, Jr.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

*Miriam C. Provost*  
for

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

**Indications for Use Statement**

**510(k)  
Number**  
(if known)

**Device Name**            BIS SRS (Semi-Reusable Sensor)

**Indications  
For Use**                The Aspect Medical Systems Semi-Reusable Sensor is applied  
directly to the patient's skin to enable recordings of  
electrophysiological (such as EEG) signals.

Prescription Use   X    
(Per 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use             
(21 CFR 807 Subpart C)

PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON ANOTHER PAGE  
IF NEEDED

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Concurrence of CDRH, Office of Device Evaluation (ODE)

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Miriam C. Provost  
**(Division Sign-Off)**  
**Division of General, Restorative,  
and Neurological Devices**

**510(k) Number**   K050313